DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

A56EU
Revision 5
Jetstream Aircraft Limited
(British Aerospace)
Jetstream Model 3201

October 6, 2003

TYPE CERTIFICATE DATA SHEET No. A56EU

This data sheet which is part of Type Certificate No. A56EU, prescribes conditions and limitations under which the product for which the type certificate was issued, meets the airworthiness requirements of the Federal Aviation Regulations.

Type Certificate Holder.

British Aerospace Regional Aircraft
Prestwick International Airport
Ayrshire KA9 2RW
Scotland

I. Jetstream Model 3201 (Commuter Category), approved September 30, 1988.

Engine.

2 Garrett TPE 331-12UA-701H (Mod. 8001)
- or TPE 331-12UAR-701H (Mods. 8020, 8112, 8127)
- or TPE 331-12UAR-702H (Mod. 8135)
- or TPE 331-12UAR-703H (Mod. 8132)
- or TPE 331-12UAR-704H (Mod. 8138)
- or TPE 331-12UAR-705H (Mod. 8161)
- or TPE 331-12UAR-706H (Mod. 8162)
- or TPE 331-12UAR-707H (Mod. 8163)
- or TPE 331-12UAR-708H (Mod. 8164)
- or TPE 331-12UHR-701H (Mod. 8205A or B)
- or TPE 331-12UHR-702H (Mod. 8205A or B)
- or TPE 331-12UHR-703H (Mod. 8205A or B)
- or TPE 331-12UHR-704H (Mod. 8205A or B)

Both engines must have the same model and part number.

Fuel.

American	British	NATO
ASTM Jet A		
ASTM Jet A1	D.Eng.RD 2494	F-35
MIL-T-83133, JP8*	D.Eng.RD 2453*	F-34*

Fuel marked thus * contain fuel system icing inhibitor (FSII) and no further additions shall be made.
(Specifications as revised)

Oil. (Engine & Gearbox)

American	NATO
MIL-L-23699B	0-156

(Specifications as revised)

Engine Limits.

Static Ratings

The static ratings for the Garrett engines are based on the conditions specified on TCDS E4WE.

Conditions	Shaft Horse Power (SHP)	Prop Shaft Speed (RPM)	Exhaust Gas Temp. (EGT) Single Red Line (°C)
Take-off and Max. cont.	1020	1591	650 (Pre-Mod 8191) or 660 (Post-Mod 8191)
Starting	-	-	770

All new and overhauled engines must meet the above acceptable limits. See CAA-approved Flight Manual HP.4.16 for additional engine Operating Limitations.

Propeller and Propeller Limits. (See Note 6)

2 Dowty Rotol (c) R.333/4-82-F/12
Blades : 4
Diameter : 106 inches (No reduction permitted)

Pitch angles at Section J-J setting line:

Start Locks	- 1°	45' + 0° 30'
Flight Idle	+ 9°	+ 0° 30'
Feathered	+ 82°	20' ± 0° 20'
Reverse	- 13°	+ 0° 30'

or

2 McCauley 4HFR34C653/L106FA (Mod. 8133)
Blades : 4
Diameter : 106 inches - one inch reduction permitted
Pitch angles at 30 inch radius setting line:

Start Locks	+ 9°	± 24'
Flight idle	+ 15°45'	± 6'
Feathered	+ 88°	± 30'
Reverse	- 4°	± 24'

Airspeed Limits.

V_{MO} (Maximum Operating Speed)	
up to 16,750 ft	250 knots
at 25,000 ft	210 knots
V_A (Manoeuvering Speed)	180 knots
V_{FE} (Flaps Extended Speed)	
Take-off (Flaps 10°)	170 knots
Approach (Flaps 20°)	160 knots
Landing (Flaps 35°)	150 knots
Lift Dump (Flaps 70°)	120 knots
V_{LE} (Landing Gear Extended Speed)	160 knots
V_{LO} (Landing Gear Operating Speed)	160 knots
V_{MC} (Minimum Control Speed)	
Take-off (Flaps 10°)	100 knots

Note: V_{MC} at sea level/15°C standard atmosphere condition. See FAA-approved Flight Manual HP.4.16 for other conditions.

C.G. Limit. (Landing Gear Extended

(+ 213.5 in.) to (+ 227.5 in.) at 11,000 lb or less;
(+ 219.0 in.) to (+ 227.5 in.) at 16,204 lb take-off weight.
Straight line variation between points given.

Moment change (landing gear retraction) -4550 lb in. (moves C.G. forward)

Datum.

Fuselage station '0' (140 inches forward of marked "cowling type" screw on the bottom surface of fuselage).

Levelling Means. Levelling marks provided on fuselage seat rails.
At station 225.5 left and right.
At station 252.5 right only.

Maximum Weight.

Ramp		16,314 lb (7400 kg)
Take-off		16,204 lb (7350 kg)
Landing		15,609 lb (7080 kg)
Zero fuel		14,330 lb (6500 kg) (Pre-Mod 8177)
	or	14,850 lb (6736 kg) (Post-Mod 8177)

Minimum Crew. 2 pilots.

Maximum Passengers. 19.

Maximum Baggage. 695 lb. (+ 377.0 in.), or as otherwise placarded at baggage compartment.

Fuel Capacity. 493 U.S. Gals. in 2 tanks (+ 225.6 in.);
488 U.S. Gals. usable.
(See NOTE 1 for data on system fuel)

Oil Capacity. 1.56 U.S. Gals./tank in each engine compartment (+ 179.8 in.);
1.50 U.S. Gals./tank usable;
(See NOTE 1 for data on system oil)

Maximum Operating Altitude 25,000 ft.

Control Surface

Elevator	28° Up	15° Down
Elevator Trim Tab	5.5° Up	8.5° Down
Rudder	25° Right	25° Left
Rudder Trim Tab	25° Right	25° Left,
relative to	7.75° Right (neutral)	
Aileron	25° Up	15° Down
Aileron Trim Tab	8.5° Up	8.5° Down
Flaps		
Take-off	10° Down	
Approach	20° Down	
Landing	35° Down	
Lift Dump	70° Down	

DATA PERTINENT TO ALL MODELS

Serial Numbers Eligible. The United Kingdom Certificate of Airworthiness for Export endorsed as noted under "Import Requirements" must be submitted for each individual aircraft for which application for certification is made.

Import Requirements. A United States Airworthiness Certificate may be issued on the basis of a United Kingdom Certificate of Airworthiness for Export signed by a representative of the United Kingdom Civil Aviation Authority containing the following statement; "The airplane covered by this certificate has been examined, tested and found to conform to the type design approved under FAA Type Certificate A56EU and is in a condition for safe operation".

Certification Basis. (See Note 4)
- FAR 21.29 and FAR Part 23, effective February 1, 1965 including Amendments 23-1 through 23.34;
- Special Conditions No. 23-ACE-36 issued April 12, 1988 for Automatic Power Reserve (APR) Systems and Alcohol-Water Injection (AWI) Systems;
- Federal Aviation Administration Exemption No. 4908 issued May 20, 1988 to allow certification with one larger overwing exit on the side opposite the main entrance door in lieu of the two smaller exits required by Section 23.807(d)(1)(ii);

- Federal Aviation Administration Exemption No. 4927 issued August 24, 1988 to allow compliance to be shown with the Ground Load and Landing Gear requirements of FAR Part 25 in effect on June 1, 1987 in lieu of the corresponding requirements of FAR Part 23 in effect on June 1, 1987; -
- Special Federal Aviation Regulation No. 27-5, effective March 18, 1986:

The approved Garrett TPE 331 engines comply with the fuel venting emission requirements of SFAR 27 with the installation of Garrett Fuel Manifold Purge System Kit No. 3101458-1;

- FAR Part 36, effective December 1, 1969 including Amendments 36-1 through 36-15.

Date of application for Type Certificate Jetstream Model 3201:
June 1, 1987.

The U.S. airworthiness certification basis for aircraft type certificated under FAR Section 21.29 and exported by the country of manufacture is FAR Section 21.183(c).

Service Information.

The Type Certificate for Jetstream Model 3201 (Series 3200) is held by BAE SYSTEMS (Operations) Ltd of Prestwick International Airport, Flight Manual, Overhaul and Maintenance Manuals, Manufacturer's Operating Manual, Structural Repair Manual, Service Bulletins, Technical Information Leaflets, Vendor Manuals, including amendments thereto, and related documents, issued by either: British Aerospace PLC - Civil Aircraft Division - Prestwick, or British Aerospace (Commercial Aircraft) Limited - Airlines Division - Prestwick, or British Aerospace Regional Aircraft Limited - Prestwick, or Jetstream Aircraft Limited or BAE SYSTEMS (Operations) Ltd, which contain a statement that the document is CAA approved, or CAA approved through the Manufacturer's CAA Approval Ref DAI/1743/44 or DAI/1011/55 or DAI/9386/92 or JAA JAR 21 Approval Ref. CAA.JA02034, are accepted by the FAA and are considered FAA approved.
These approvals pertain to the type design only.

Other available service documents that are required for the British Aerospace Jetstream include:

1) SA.4-3100/ AMM/xxx	Maintenance Manual
2) SA.4-3100/MS/2	Maintenance Schedule, including appropriate supplements
3) SA.4-3100/WM/xxx	Wiring Diagram Manual
4) SA.4-3100/ITEM/1	Illustrated Tool & Equipment Manual
5) SA.4-3100/IPC/1	Illustrated Parts Catalogue
6) SA.4-3100/CMM/xxx	Component Maintenance Manual
7) SA.4-3100/QEC/1	Quick Engine Change Manual
8) SA.4-3100/SRM/1	Structural Repair Manual
9) SA.4-3100/WBM/xxx	Weight and Balance manual

Equipment.
(See Note 5)

The basic equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the airplane. British Aerospace Illustrated Parts Catalogue Document No. SA.4-3100/IPC/1 identifies all required equipment and all optional equipment approved by the CAA of the United Kingdom. In addition, CAA-Approved Flight Manual HP.4.16, as appropriately amended in relation to the actual modification standard of the airplane is required.

NOTES:

NOTE 1. Current weight and balance report, including list of equipment included in the certified empty weight and loading instructions when necessary, must be in each airplane at the time of original certification and at all times thereafter (except in the case of operators having an approved weight control system).

The certificated empty weight and corresponding center of gravity locations must include:
Unusable fuel of 38 lb. at (+ 215.6 in.)
Unusable oil of 7 lb. at (+ 200.0 in.)

NOTE 2. The following placards must be displayed in full view of the pilot:

a) "This airplane must be operated as a commuter category airplane in compliance with the operating limitations stated in the form of placards, markings and manuals. No aerobatic manoeuvers, including spins, approved".

Footnote
All placards required in the FAA-approved Flight Manual must be installed in the appropriate locations.

b) Each individual airplane will be supplied with a placard that specifies the kinds of operation, such as VFR or IFR, Day and Night to which the operation of the airplane is limited by the equipment installed.

NOTE 3. The service life limits for aircraft structural parts which are fatigue critical are listed in the Airworthiness Limitations Section 5 of Maintenance Manual Doc No. SA-4-3100/MM/XXX for the airplane.

NOTE 4. Compliance with the Special Conditions for AWI systems has been shown for BAe Modification No. KIT 3465. Embodiment of this Modification requires the incorporation of Supplement No. S1 and Particular Amendments Nos. P/4 and P/14 in CAA-approved Flight Manual HP.4.16 for the airplane.

Compliance with the Special Conditions for APR systems has been shown for BAe Modification No. KIT 3469. Embodiment of this Modification requires the incorporation of Supplement No S2 in CAA-Approved Flight Manual HP.4.16 for the airplane.

Modifications Nos KIT 3465 and KIT 3469 cannot be simultaneously embodied on the same airplane.

NOTE 5. The Flight Data Recorder of BAe KIT 2625 installed under cover of BAe Modification No KIT 2616 (or equivalent installation modification), does not comply with the requirements of FAR 135.152(a) as insufficient parameters are being recorded and is not approved for installation on aircraft which are brought onto the US register after October 11, 1991.

NOTE 6. The Dowty Rotol propeller is compatible only with Garrett TPE 331-12UA(R)-701H, 12UAR-703H, 12UAR-705H, 12UAR-707H, 12UHR-701H and 12UHR-703H engines.

The McCauley propeller is compatible only with Garrett TPE 331-12UAR-702H, 12UAR-704H, 12UAR-706H, 12UAR-708H, 12UHR-702H and 12UHR-704H engines.

Embodiment of McCauley propellers requires the incorporation of Particular Amendment No P/17 in the basic part of CAA-Approved Flight Manual HP.4.16 and the incorporation of Particular Amendment No P/22 in Supplement No 52 in the CAA-Approved Flight Manual HP.4.16 for the airplane.

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